Abstract of the Disclosure

In one embodiment, a method for supporting address translation in a virtual-machine environment includes creating a guest translation data structure to be used by a guest operating system for address translation operations, creating an active

5   translation data structure based on the guest translation data structure, and periodically modifying the content of the active translation data structure to conform to the content of the guest translations data structure. The content of the active translation data structure is used by a processor to cache address translations in a translation-lookaside buffer (TLB).